

two skis disposed on the frame; and
a steering device disposed on the frame and operatively connected to the two skis for steering the snowmobile;

wherein the snowmobile has a center of gravity without a rider and the steering device is disposed on the frame forward of the center of gravity, and wherein the forward-most axle is positioned forward of the center of gravity and rearward of a rearward-most portion of the steering device such that the center of gravity is rearward of the rearward-most portion of the steering device, and

wherein an angle between a line passing through the forward-most drive track axle and the center of gravity and a horizontal line passing through the forward-most drive track axle is less than 55° .

61. (Five Times Amended) A snowmobile, comprising:

a frame having a forward-most drive axle mounted thereon;

a straddle seat disposed on the frame, the seat being dimensioned to support a standard rider in a standard position in which the standard rider straddles the seat while the snowmobile is heading straight ahead on flat terrain, the standard rider having dimensions and weight of a 50-percentile human male;

an engine disposed on the frame in front of the seat;

two skis disposed on the frame; and

a steering device disposed on the frame and operatively connected to the two skis for steering the snowmobile;

wherein the snowmobile is adapted to have a center of gravity with a rider in the standard position such that the steering device and the forward-most drive axle are disposed

on the frame forward of the center of gravity, and such that the forward-most drive axle is positioned rearward of a rearward-most portion of the steering device so that the center of gravity is rearward of the rearward-most portion of the steering device, and

wherein an angle between a line passing through the forward-most drive track axle and the center of gravity and a horizontal line passing through the forward-most drive track axle is less than 55° .

73. (Five Times Amended) A snowmobile, comprising:

a frame;

a straddle seat disposed on the frame;

an engine disposed on the frame in front of the seat;

two skis disposed on the frame;

a steering device disposed on the frame and operatively connected to the two skis for steering the snowmobile; and

right and left sideboards extending laterally from the frame below the seat on either side thereof, each of the sideboards having a forward portion suitable for placement of a rider's foot thereon, the forward portion of each sideboard disposed at an angle Δ with horizontal that is between -5° to -10° ; and

right and left toe-holds disposed respectively above the forward portion of each sideboard for allowing the rider to releasably secure himself to the snowmobile.

84. (Twice Amended) A snowmobile, comprising:

a frame;

an engine disposed on the frame;

a drive track disposed below the frame and connected operatively to the engine for propulsion of the snowmobile;

two skis disposed on the frame;

a straddle seat disposed on the frame behind the engine, the seat being dimensioned to support a standard load having dimensions and weight of a 50-percentile human male, the load having a center of gravity;

a footrest positioned on each side of the seat; and

a steering device disposed on the frame forward of the seat, the steering device being operatively connected to the two skis for steering the snowmobile,

wherein the seat, each said footrest and the steering device are positioned and dimensioned with respect to one another so that the snowmobile 1) has a first center of gravity without the standard load and 2) has a second center of gravity with the standard load, and

wherein a distance between a vertical line passing through the first center of gravity and a vertical line passing through the second center of gravity is between 0 cm and 14 cm.

87. (Amended) A snowmobile, comprising:

a frame;

an engine disposed on the frame;

a drive track disposed below the frame and connected operatively to the engine for propulsion of the snowmobile;

two skis disposed on the frame;

a straddle seat disposed on the frame behind the engine, the seat being dimensioned to support a standard rider, the standard rider having dimensions and weight of a 50-percentile human male; and

a steering device disposed on the frame forward of the seat, the steering device being operatively connected to the two skis for steering the snowmobile,

wherein the snowmobile has a first center of gravity without the rider and wherein the snowmobile is adapted to have a second center of gravity with the rider such that, in use, a distance between a vertical line passing through the first center of gravity and a vertical line passing through the second center of gravity is between 0 cm and 14 cm.

89. (Amended) A snowmobile, comprising:

a frame including a tunnel having a forward-most drive track axle disposed thereon;

a straddle seat disposed on the frame above the tunnel;

an engine disposed on the frame in front of the seat;

two skis disposed on the frame; and

a steering device disposed on the frame and operatively connected to the two skis for steering the snowmobile;

wherein the snowmobile has a center of gravity without a rider, and wherein the center of gravity and the forward-most drive track axle are positioned rearward of a rearward-most portion of the steering device, and

wherein an angle between a line passing through the forward-most drive track axle and the center of gravity and a horizontal line passing through the forward-most drive track axle is less than 55°.

92. (Twice Amended) An assembly comprising:

- a frame including a tunnel;
- a straddle seat mounted on the frame;
- an engine disposed on the frame in front of the seat;
- two skis disposed on the frame;
- a steering shaft operatively connected to the two skis, the steering shaft being disposed over the engine at an angle ε of between 25° and 40° from vertical;
- wherein the tunnel supports a drive belt coupled to the engine and defines a footrest on each side of the seat that is inclined at an angle Δ with horizontal that is between 0° to -10° ; and
- wherein a forward-most axle of the drive belt is positioned rearward of the steering shaft.

See the attached Appendix for the changes made to effect the above claims.